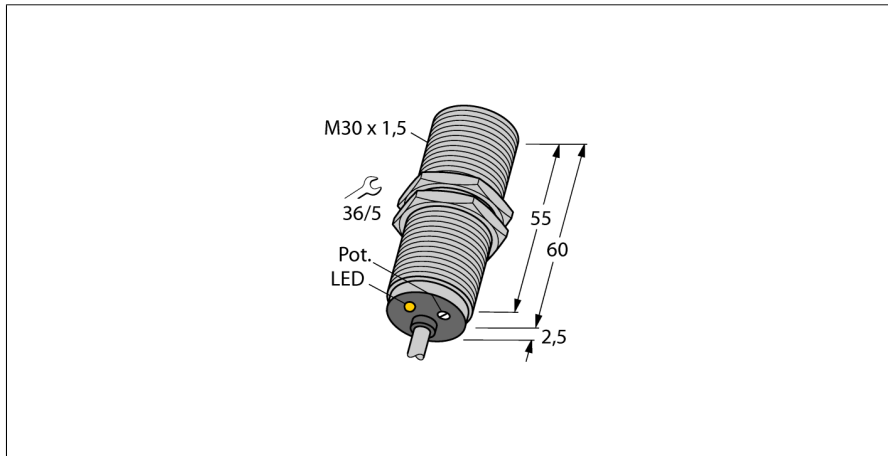


Capacitive sensor BC10-M30K-VN4X

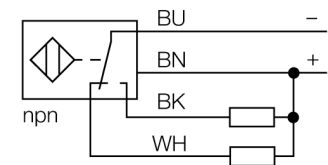
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Industrial
Automation



- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Fine adjustment via potentiometer
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- Cable connection

Wiring diagram



Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Type code	BC10-M30K-VN4X
Ident no.	2503024
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Assured sensing range	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperature drift	type $\leq \pm 20$ %
Repeatability	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U_{s}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Rated insulation voltage	≤ 0.5 kV
Output function	4-wire, changover contact, NPN
Short-circuit protection	yes/ cyclic
Voltage drop at I_0	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Design	threaded barrel, M30 x 1.5
Dimensions	62.5 mm
Housing material	metal, CuZn, chrome-plated
Material active area	Plastic, PA, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	25 Nm
Connection	cable
Cable quality	\varnothing 5.2, LiYY, PVC, 2 m
Cable cross section	4 x 0.34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

Capacitive sensor BC10-M30K-VN4X

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Mounting instructions / Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

Diameter of the active area B \varnothing 30 mm



The given minimum distances have been checked in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

